CLAIMS

1. A binaural hearing aid system comprising

a first hearing aid and a second hearing aid, each of which comprises

a microphone and an A/D converter for provision of a digital input signal in response to sound signals received at the respective microphone in a sound environment,

a processor that is adapted to process the digital input signals in accordance with a predetermined signal processing algorithm to generate a processed output signal, and

a D/A converter and an output transducer for conversion of the respective processed sound signal to an acoustic output signal, and

a binaural sound environment detector for binaural determination of the sound environment surrounding a user of the binaural hearing aid system based on at least one signal from the first hearing aid and at least one signal from the second hearing aid for provision of outputs for each of the first and second hearing aids for selection of the signal processing algorithm of each of the respective hearing aid processors so that the hearing aids of the binaural hearing aid system perform coordinated sound processing.

2. A system according to claim 1, wherein the binaural sound environment detector having inputs for each of the digital input signals is provided in a remote control of the system.

3. A system according to claim 1, wherein the binaural sound environment detector is provided in one of the hearing aids and provides an output for the other hearing aid.

4. A system according to claim 1, wherein each of the hearing aids comprises a binaural sound environment detector.

5. A system according to any of the preceding claims, wherein the binaural sound environment detector comprises

a feature extractor for determination of characteristic parameters of the received sound signals,

an environment classifier for categorizing the sound environment based on the determined characteristic parameters, and

a parameter map for the provision of outputs for selection of the signal processing algorithms.

6. A system according to claim 4 and 5, wherein each of the feature extractors has inputs for each of the digital input signals.

7. A system according to claim 4 and 5, wherein each of the environment classifiers has inputs connected to each of the feature extractors.

8. A system according to claim 4 and 5, wherein each of the parameter maps has inputs for connected to each of the environment classifiers.